

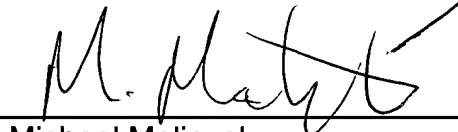
REMARKS

In response to the Examiner's restriction requirement under 35 U.S.C. §121, Applicant has cancelled Claims 1-15 and has elected, without traverse, Claims 16-20 drawn to the seat assembly, as classified in Class 297, Subclass 353. Further, Applicant has added new Claims 21-35 for a fold-flat hinge apparatus for use with a seat assembly including a seat back rotatably connected to a seat. These claims for a fold-flat hinge apparatus are drafted for utility with a seat assembly and, therefore, the applicable art would be classified with the invention of Claims 16-20, namely Class 297, Subclass 353. Restriction for examination purposes between Claims 16-20 and 21-35 would not be proper because the claims as pending do not have separate status in the art.

Respectfully submitted,

Dated: June 14, 2002

By:

A handwritten signature in black ink, appearing to read "M. Malinzak", is written over a horizontal line. A long, thin diagonal line extends from the top right of the signature towards the upper right corner of the page.

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ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

1-15. (CANCELLED)

16. A seat assembly, comprising:

a seat;

a seat back connected to said seat;

a fold-flat hinge assembly, including:

a support member;

an arm pivotally supported by said support member, mounting said seat back, and including a plurality of gear teeth formed thereon;

a shaft rotatably supported within a first slot of said support member;

a blocking pin slidably supported by said support member and in mechanical communication with said shaft, said blocking pin slidable to a first position wherein said blocking pin prevents forward rotational motion of said arm relative to said support member; and

a gear fixedly attached to said shaft and interacting with said gear teeth of said arm to move said blocking pin to a second position wherein said arm is free to rotate relative to said support member and whereby said seat back is rotatable relative to said seat.

17. The seat assembly according to claim 16, further comprising at least one lever arm pivotally attached to said support member at a pivot point and wherein said lever arm rotatably supports said shaft at a first end and a link arm at a second end, said link arm further connecting to said sliding pin.

18. The seat assembly according to claim 16, further comprising a slot formed in said arm and a stop pin attached to said support member, said slot slidably interfacing said stop pin for defining a rotational range of motion of said arm relative to said support member.

19. The seat assembly according to claim 16, wherein said shaft is also slidably supported in said first slot by said support member for sliding from a first position to a second position in response to said gear interacting with said gear teeth for moving said blocking pin to said second position.

20. The seat assembly according to claim 19, wherein said arm is able to rotate relative to said support member when said shaft is in said second position.

21. (NEW) A fold-flat hinge apparatus for use with a seat assembly including a seat back rotatably connected to a seat, said apparatus comprising:

a support member;

an arm pivotally supported by said support member, including a plurality of gear teeth formed thereon, and adapted to mount the seat back for rotation relative the seat;

a shaft rotatably supported within a first slot of said support member;

a blocking pin slidably supported by said support member and in mechanical communication with said shaft, said blocking pin slidable to a first position wherein said blocking pin prevents rotational motion of said arm relative to said support member; and

a gear fixedly attached to said shaft and interacting with said gear teeth of said arm to move said blocking pin to a second position wherein said arm is free to rotate relative to said support member.

22. (NEW) The fold-flat hinge apparatus according to claim 21, further comprising at least one lever arm pivotally attached to said support member at a pivot point and wherein said lever arm rotatably supports said shaft at a first end and a link arm at a second end, said link arm further connecting to said sliding pin.

23. (NEW) The fold-flat hinge apparatus according to claim 21, further comprising a slot formed in said arm and a stop pin attached to said support member, said slot slidably interfacing said stop pin for defining a rotational range of motion of said arm relative to said support member.

24. (NEW) The fold-flat hinge apparatus according to claim 21, wherein said shaft is also slidably supported in said first slot by said support member for sliding from a first position to a second position in response to said gear interacting with said gear teeth for moving said blocking pin to said second position.

25. (NEW) The fold-flat hinge apparatus according to claim 24, said arm able to rotate relative to said support member when said shaft is in said second position.

26. (NEW) The fold-flat hinge apparatus according to claim 21, further comprising an electric motor for rotating said shaft.

27. (NEW) The fold-flat hinge apparatus according to claim 26, wherein operation of said electric motor comprises a forward mode, a reverse mode and a stop mode.

28. (NEW) The fold-flat hinge apparatus according to claim 21, further comprising a dial for manually rotating said shaft.

29. (NEW) A powered fold-flat seat hinge apparatus for use with a seat and seat back, said powered fold-flat seat hinge assembly, comprising:

a support member including a first slot therein;

an arm pivotably supported by said support member and having a plurality of gear teeth formed thereon, said arm adapted to support the seat back;

a shaft rotatably supported within said first slot of said support member;

a gear fixedly attached to said shaft and interfacing said arm;

a blocking pin slidably supported by said support member between a first position and a second position and mechanically communicating with said shaft, said blocking pin preventing rotation of said arm relative to said support member in said first position

and allowing said arm to rotate relative to said support member in said second position;
and

an electric motor for rotating said shaft to cause said arm to rotate relative to said support member.

30. (NEW) The powered fold-flat seat hinge apparatus according to claim 29, wherein said blocking pin is moved to said second position by said shaft interacting with said gear teeth of said arm.

31. (NEW) The powered fold-flat seat hinge apparatus according to claim 29, further comprising at least one lever arm pivotally attached to said support member at a pivot point and wherein said lever arm rotatably supports said shaft at a first end and a link arm at a second end, said link arm further connecting to said sliding pin.

32. (NEW) The powered fold-flat seat hinge apparatus according to claim 29, further comprising a slot formed in said arm and a stop pin attached to said support member, said slot slidably interfacing said stop pin for defining a rotational range of motion of said arm relative to said support member.

33. (NEW) The powered fold-flat seat hinge apparatus according to claim 29, wherein said shaft is also slidably supported in said first slot by said support member for sliding from a first position to a second position in response to said gear interacting with said gear teeth for moving said blocking pin to said second position.

34. (NEW) The powered fold-flat seat hinge apparatus according to claim 29, wherein said arm is able to rotate relative to said support member when said shaft is in said second position.

35. (NEW) The powered fold-flat seat hinge apparatus according to claim 29, wherein operation of said electric motor comprises a forward mode, a reverse mode and a stop mode.